REMARKS

Prior to entry of this amendment, claims 1-8, 19-26 and 36-40 are pending in the subject application. Claims 9-18 and 27-35 have been withdrawn in connection with the election requirement mailed on December 28, 2005. Claims 1 and 19 are independent.

By this amendment, applicants amended claims 39 and 40. Applicants have not added any new matter.

Claims 1-8, 19-26 and 36-40 are presented to the Examiner for further or initial consideration on the merits.

A. Introduction

In the outstanding Office action, the Examiner rejected claims 39 and 40 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention; rejected claims 1-5 and 7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,515,085 to Hotomi et al. ("the Hotomi et al. reference"); rejected claims 19-23 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over the Hotomi et al. reference in view of U.S. Patent Application Publication No. 2003/0122895 to Torgerson et al. ("the Torgerson et al. reference"); and objected to claims 6, 8, 24 and 36-38 as being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

B. Asserted Indefiniteness Rejections of Claims 39 and 40

In the outstanding Office action, the Examiner rejected claims 39 and 40 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Applicants amended claims 39 and 40 and submit that claims 39 and 40 satisfy the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, applicants respectfully

request that the rejection of claims 39 and 40 under 35 U.S.C. § 112, second paragraph, be withdrawn.

C. Asserted Anticipation Rejection of Claims 1-5 and 7

In the outstanding Office action, the Examiner rejected claims 1-5 and 7 under 35 U.S.C. § 102(b) as being anticipated by the Hotomi et al. reference. Applicants respectfully traverse this rejection for at least the following reasons.

The grounds of rejection fail to establish a *prima facie* case of anticipation, or in the alternative, a *prima facie* case of obviousness, because the Hotomi et al. reference fails to disclose or suggest a droplet ejector that includes, *inter alia,* the volumetric structure and the stimulus generator as claimed in claim 1.

Claim 1 is directed to a droplet ejector that includes, *inter alia,* "a stimulus generator, which applies a stimulus to the volumetric structure..., wherein the droplet ejector is configured to eject the droplet of fluid upon application of the stimulus." The grounds of rejection advance that the volume changeable liquid 26 of FIG. 14 (col. 4, lines 33-40 of the Hotomi et al. reference) corresponds to the volumetric structure, and the separate electrode 31 and common electrode 32 of FIG. 14 (col. 6, lines 43-46 of the Hotomi et al. reference) corresponds to the stimulus generator. Applicants respectfully disagree.

As acknowledged by the Examiner, the allegedly corresponding ink-jet type recorder of the Hotomi et al. reference requires the following: "the electric field has to be first applied and then removed in order for the EVL to decrease and increase in size, causing the droplet to be ejected" (*Office action of July 27, 2006, page 3, paragraph 3).*

In view of the above, applicants respectfully submit that the Examiner's interpretation of the volumetric structure and the stimulus generator of the droplet ejector as claimed in claim 1 is *unreasonably broad (emphasis added).* The Examiner's interpretation is not consistent with how one of ordinary skill in the art would interpret, *inter alia,* the volumetric

structure and the stimulus generator of the droplet ejector as claimed in claim 1 and conflicts with the plain meaning given to "a stimulus generator, which applies a stimulus" and "upon application of the stimulus" in other patents from analogous art *(MPEP §2111.01 - Plain Meaning)*. Accordingly, the grounds of rejection fail to establish a *prima facie* case of anticipation, or in the alternative, a *prima facie* case of obviousness because the Hotomi et al. reference fails to disclose or suggest a droplet ejector that includes, *inter alia,* the volumetric structure and the stimulus generator as claimed in claim 1.

The United States Court of Appeals for the Federal Circuit in In Re American Academy of Science Tech Center, 367 F.3d 1359, 1364, 70 U.S.P.Q.2d 1827 (Fed. Cir. 2004) has stated "[a]lthough the PTO must give claims their broadest reasonable interpretation, this interpretation must be consistent with the one that those skilled in the art would reach" *citing* In Re Gilbert P. Hyatt, 211 F.3d 1367 at 1372 (Fed. Cir. 2000). However, despite this framework, the grounds of rejection advance an *unreasonably broad interpretation* of the droplet ejector of claim 1 and concomitantly fail to establish a *prima facie* case of anticipation, or in the alternative, a *prima facie* case of obviousness for claim 1 *(emphasis added)*.

Applicants respectfully submit that *halting* the impressing of the voltage to the electrodes (col. 3, lines 35-37 of the Hotomi et al. reference) fails to disclose or suggest *"a stimulus generator, which applies a stimulus"* or *"upon application of the stimulus,"* as claimed in the context of claim 1. The Hotomi et al. reference does not disclose or suggest that the ink-jet type recorder ejects a droplet of fluid when the electric field, allegedly corresponding to the *stimulus*, is applied to the EVL *(emphasis added)* (*Id.*; col. 4, lines 33-37). Rather, as acknowledged by the Examiner, the ink-jet type recorder ejects the recording liquid 1 upon the *removal of the electric field* (i.e., removal of the stimulus) *(emphasis added)* (*Id.*).

Applicants respectfully submit that the separate and common electrodes 31, 32 of the Hotomi et al. reference *do not* apply two stimuli; an electric field and the absence of an electric field *(emphasis added)*. If this were the case, a power source, such as a battery, could be considered a generator which applies the absence of electricity when it is disconnected. The separate and common electrodes 31, 32 of the Hotomi et al. reference generate in a controlled manner the application of only one stimulus, an *electric field (emphasis added)*. That is, the separate and common electrodes 31, 32 of the Hotomi et al. reference do not disclose or suggest a stimulus generator which applies a stimulus (i.e., an absence of an electric field) to the volumetric structure. Accordingly, applicants respectfully submit that the Hotomi et al. reference fails to disclose or suggest a droplet ejector that includes, *inter alia,* the volumetric structure and the stimulus generator as claimed in claim 1.

For at least these reasons, applicants respectfully submit that the Hotomi et al. reference fails to disclose or suggest a droplet ejector including, *inter alia,* the volumetric structure and the stimulus generator as claimed in claim 1. Accordingly, applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn. Since claims 2-5 and 7 overcome the Hotomi et al. reference at least by virtue of their dependency on claim 1, applicants respectfully request that the rejection of claims 2-5 and 7 under 35 U.S.C. § 102(b) also be withdrawn.

D. Asserted Obviousness Rejection of Claims 19-23 and 25-16

In the outstanding Office action, the Examiner rejected claims 19-23 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over the Hotomi et al. reference in view of the Torgerson et al. reference. Applicants respectfully traverse this rejection for at least the following reasons.

The Examiner has already acknowledged applicants claim for foreign priority and receipt of all certified documents *(Office action of July 27, 2006, Office Action Summary)*.

Applicants are submitting herewith an English translation of the foreign priority document, along with a statement that the English translation of the certified copy is accurate. Applicants respectfully submit that the Torgerson et al. reference does not qualify as prior art, since its publication date of July 3, 2003, is after the foreign priority date of January 21, 2003, of the instant application.

The Examiner has acknowledged the deficiencies of the Hotomi et al. reference regarding the ink-jet printhead as claimed in claim 19 *(Id., page 6, paragraph 7)*. Accordingly, applicants respectfully request that the rejection of claim 19 under 35 U.S.C. § 103(a) be withdrawn. Since claims 20-23 and 25-26 overcome the Hotomi et al. reference at least by virtue of their dependency on claim 19, applicants respectfully request that the rejection of claims 20-23 and 25-26 under 35 U.S.C. § 103(a) also be withdrawn.

E. Allowable Subject Matter

Applicants appreciate the Examiner's indication of allowable subject matter in claims 6, 8, 24 and 36-38. However, applicants respectfully submit that *all* of the pending claims 1-8, 9-26 and 36-38 are allowable over the applied prior art. Accordingly, applicants have not rewritten claims 6, 8, 24 and 36-38 in independent form.

F. Conclusion

In view of the above, applicants respectfully submit that claims 1-8, 19-26 and 36-38 are allowable over the applied prior art. As claims 1 and 19 are generic to withdrawn claims 9-18 and 27-35, respectively, applicants respectfully request that the election of species requirement of December 28, 2005, be withdrawn and claims 9-18 and 27-35 be rejoined.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: October 26, 2006

Eugene M. Lee, Reg. No. 32,039

LEE & MORSE, P.C.
3141 FAIRVIEW PARK DRIVE
SUITE 500
FALLS CHURCH, VA 22042
703.207.0008 TEL
703.207.0003 FAX

PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.